Transmission Costs

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The Transmission Component Of Retail Electricity Bills Is Increasingly Significant

- Transmission costs charged to residential customers of Public Service Company of New Hampshire increased by 374% over the past 10 years.
- Distribution costs increased by only 73%.
- As a result, transmission now accounts for 23% of residential customer delivery costs, up from 5% in 2006.
Transmission Costs Are Driven By The Regional Network Service Rate

• The increase in retail transmission charges over the last decade was driven by a fourfold increase in the annual cost of high voltage transmission.

• The annual cost of HV transmission is a function of the Regional Network Service (RNS) rate, which has risen from about $20/kW-yr ten years ago to almost $100/kW-yr today. In 2020, the RNS rate is expected to climb to $124/kW-yr.
Change in RNS Rate

![Graph showing the change in RNS Rate from 2005/06 to 2019/20. The Y-axis represents $kW-yr, and the X-axis represents years from 2005/06 to 2019/20. The data shows a steady increase in RNS Rate over the years.](image-url)
Causes Of The Increase In The RNS Rate

The increase in the RNS rate is commonly attributed to:

a) Substantial new investment to integrate new transmission facilities and upgrade/replace aging existing facilities; and

b) Cost increases driven by high equity returns, generous incentive payments; and large cost overruns.
Wholesale Power Cost Breakdown, 2010-2014 ($/MWh)

- RTO Cost & Regulatory Fees
- Operating Reserves
- Ancillary Services
- Transmission
- Capacity
- Energy

**ISO-NE**

**CAISO*** *(Does Not Include Tx)*

**MISO**

**NYISO**

**PJM**

**SPP**

*Transmission*
Traditional Transmission Cost Recovery Methods Are Not Compatible With Cost Minimization

• The combination of uncapped project cost recovery methods, high equity returns, generous incentive payments, and ineffective prudency reviews by the federal regulator is a recipe for excessive transmission costs.
FERC’s Order 1000 Prescription

• Requiring project developers to compete on the basis of price and performance, as directed by FERC in Order 1000, is the only sure way to achieve cost discipline in the transmission sector.

• Other RTOs have developed and implemented competitive solicitation and evaluation processes for reliability projects, and are working to improve those processes.

• This suggests that ISO-NE can and should comply with FERC’s Order 1000 directive to implement competition in the transmission sector.
Other Factors Are Contributing To The High Cost Of Transmission In NE

• As competitive solicitation processes for the transmission sector are relatively new, other factors must explain the significant disparity in the cost of transmission for ISO-NE compared to other RTOs.

• While factors like population density, land costs and siting requirements undoubtedly play some part in accounting for the cost differences, the number of reliability projects implemented and hence the total transmission cost is more likely explained by the standards used by RTOs to conduct system evaluations.

• Are ISO-NE reliability standards too conservative?